CLAIMS

We claim:

1. An electronic access control device comprising:

a circuit having a portion deactivated during a first time period;

the portion of the circuit enabled during a second time period,

the portion of the circuit having an enable output signal generated in response to a sensed electromagnetic signal;

the portion of the circuit being enabled for an extended time period that is greater than the second time period;

the portion of the circuit having an input code output generated in response to the electromagnetic signal and during the extended time period;

a microprocessor having an unlock output signal generated if the input code matches the access code; and,

an electromechanical driver having an output signal generated in response to the unlock signal.

2. The device of claim 1, the portion of the circuit comprising a wake-up circuit.

3. The device of claim 1, the portion of the circuit comprising a receiver.

4. The device of claim 1, the portion of the circuit comprising a wake-up circuit and a receiver.

5. The device of claim 1, the portion of the circuit comprising an antenna.

6. The device of claim 1, further comprising at least one of the following is responsive to the output signal of the electromechanical driver: a solenoid; an electromechanical relay; a DC motor; and, a solid-state relay.

7. The device of claim 1, wherein the electromagnetic signal is infrared.

8. The device of claim 1, wherein the electromagnetic signal is within a radio frequency.

9. An apparatus comprising:

a first circuit comprising an oscillator and having a first circuit output signal;

a second circuit enabled and disabled in response to the first circuit output signal, the second circuit having a second circuit output signal generated in response to receipt of an electromagnetic signal;

a third circuit temporarily enabled during the receipt of the electromagnetic signal, the circuit having a third circuit output signal comprising an input code generated in response to receipt of an electromagnetic signal;

a fourth circuit temporarily enabled to compare the input code to an access code; and,

an electromechanical driver having an output that is provided to an unlock device if the input code matches the access code.

10. The apparatus of claim 9, the first and second circuits comprising a wake-up circuit.

11. The apparatus of claim 9, the third circuit comprising a decode circuit.

12. The apparatus of claim 9, the unlock device comprising at least one of the following: a solenoid; an electromechanical relay; a DC motor; and, a solid-state relay.

13. The apparatus of claim 9, wherein the electromagnetic signal is infrared.

14. The apparatus of claim 9, wherein the electromagnetic signal is within a radio frequency.

15. An apparatus comprising:

an oscillator having an output comprising a plurality of duty cycles;

a circuit that is periodically enabled for a time t_1 and disabled for a time t_2 during at least some of the duty cycles;

a portion of the circuit that generates an input code in response to an electromagnetic signal;

a microprocessor that compares the input code to an access code;

a switch that enables the portion of the circuit as the input code is being received for a time t_3 that is greater than the time t_1.

16. The apparatus of claim 15 wherein the portion of the circuit is a decoder.

17. The apparatus of claim 15 wherein the switch is responsive to an override signal generated by the decoder.

18. The apparatus of claim 15 further comprising an unlock device responsive to an unlock signal generated by the microprocessor.

19. The apparatus of claim 18, the unlock device comprising at least one of the following: a solenoid; an electromechanical relay; a DC motor; and, a solid-state relay.

20. The apparatus of claim 15 further comprising an electromechanical driver electrically connected to the microprocessor and an unlock device.

21. The apparatus of claim 15, wherein the electromagnetic signal is infrared.

22. The apparatus of claim 15, wherein the electromagnetic signal is within a radio frequency.

23. A circuit operating on current drained from a battery comprising:

an electronic circuit having an output that indicates detection of a device capable of providing an electromagnetic signal;

a decoder that extracts an input code transmitted via the electromagnetic signal;

a switch that, in response to an input, increases the current drained from the battery;

an electronic circuit that compares the input code to an access code;

an electronic circuit that provides an output to an unlock device if the input code matches the access code; and,

wherein the switch decreases the current drained from the battery after receiving the input code.

24. The circuit of claim 23, the electronic circuit that provides the output to the unlock device comprising a microprocessor.

25. The circuit of claim 23, the electronic circuit that provides the output to the unlock device comprising an electromechanical driver.

26. The circuit of claim 23, the circuit that compares the input code to an access code comprising a microprocessor.

27. The circuit of claim 23, the unlock device comprising at least one of the following: a solenoid; an electromechanical relay; a DC motor; and, a solid-state relay.

28. The circuit of claim 23, wherein the electromagnetic signal is infrared.

29. The circuit of claim 23, wherein the electromagnetic signal is within a radio.